AMENDMENTS TO THE CLAIMS:

1. (Currently amended) An optical module ~~in which~~ comprising:

an optical active element; and

an optical waveguide ~~are optically coupled, characterized in that~~ formed separately from said optical active element, said optical waveguide being optically coupled to said optical active element and including a spot-size conversion region, configured by gradually increasing or reducing ~~a~~ the width or ~~a~~ the thickness, or both, of ~~a~~ said optical waveguide, ~~or both thereof is provided~~ at the end or inside of said optical waveguide adjacent to ~~which~~ where said optical active element is coupled.

2. (Currently amended) The optical module according to claim 1, wherein said optical active element ~~is~~ comprises a light-emitting element. ~~and said spot-size conversion region is configured by reducing a width or a thickness of a waveguide, or both thereof all the more in said light-emitting element side.~~

3. (Currently amended) The optical module according to claim 1, wherein said optical active element ~~is~~ comprises a photoreceptive element. ~~and said spot-size conversion region is configured by increasing a width or a thickness of a waveguide, or both thereof all the more in said photoreceptive element side.~~

4. (Currently amended) An ~~The~~ optical module ~~according to claim 1, characterized in~~

~~that~~ for coupling to an optical active element, said optical module comprising:

an optical waveguide having a spot-size conversion region at an end thereof adapted for coupling to the optical active element, or inside of said optical waveguide, said conversion region configured by gradually increasing or reducing the width or the thickness, or both, of said optical waveguide; and

an optical coupling part having a refractive index matching resin therein, said resin having the same-level refractive index as that of said optical waveguide, ~~is charged in the~~ said optical coupling part being adapted to be positioned between said optical waveguide and ~~said~~ the optical active element.

5. (Currently amended) An ~~The~~ optical module ~~according to claim 1,~~ comprising first and second optical active elements; and an optical waveguide having spot-size conversion regions, wherein:

said optical waveguide ~~is~~ comprises a Y-type branch optical waveguide ~~wherein one~~ having a single-mode waveguide section ~~was~~ branched into ~~a~~ first and ~~a~~ second branch ~~waveguides and~~ waveguide sections,

said optical active ~~element includes:~~ elements include a light-emitting element ~~being~~ optically coupled to said first branch ~~waveguide; and~~ waveguide section, and a photoreceptive element ~~being~~ optically coupled to said second branch waveguide section; and

said spot-size conversion ~~region includes:~~ regions include:

a first spot-size conversion region configured by reducing ~~a~~ the width or ~~a~~ the thickness, or both, of ~~a waveguide, or both thereof all the more in~~ said waveguide on the

light-emitting element side thereof, said first spot-size conversion region being provided at the end or inside of said first branch waveguide section; ~~to which said light-emitting element is optically coupled;~~ and

a second spot-size conversion region configured by increasing ~~a~~ the width or ~~a~~ the thickness, or both, of ~~a waveguide, or both thereof increases all the more in~~ said waveguide on the photoreceptive element side thereof, said second spot-size conversion region being provided at the end or inside of said second branch waveguide section. ~~to which said photoreceptive element is optically coupled.~~

6. (Currently amended) The optical module according to claim 5, ~~characterized in that~~ further comprising a refractive index matching resin having the same-level refractive index as that of said single-mode waveguide, ~~is charged in the optical coupling part~~ said resin being adapted to be between said single-mode waveguide section and an optical fiber.

7. (Currently amended) An ~~The~~ optical module ~~according to claim 1,~~ comprising first and second optical active elements; and an optical waveguide having spot-size conversion regions, wherein:

said optical waveguide ~~is~~ comprises a Y-type branch optical waveguide ~~wherein one~~ having a single-mode waveguide section ~~was~~ branched into ~~a~~ first and ~~a~~ second branch ~~waveguides~~ waveguide sections;

~~said optical module further comprising:~~

said optical active ~~element includes:~~ elements include a light-emitting element ~~being~~

optically coupled to said first branch ~~waveguide; and~~ waveguide section, and a photoreceptive element ~~being~~ optically coupled to said single-mode waveguide section; ~~and~~

said spot-size conversion ~~region includes:~~ regions include:

a first spot-size conversion region configured by reducing ~~a~~ the width or ~~a~~ the thickness, or both, of ~~a waveguide, or both thereof all the more in~~ said waveguide on the light-emitting element side thereof, said first spot-size conversion region being provided at the end or inside of said first branch waveguide section; ~~to which said light-emitting element is optically coupled;~~ and

a second spot-size conversion region configured by increasing ~~a~~ the width or ~~a~~ the thickness, or both, of ~~a waveguide, or both thereof all the more in~~ said waveguide on the photoreceptive element side thereof, said second spot-size conversion region being provided at the end or inside of said single-mode waveguide section; ~~to which said photoreceptive element is optically coupled;~~ and

said optical module further comprises a device for separating ~~a function which divides~~ lights ~~with~~ of different ~~wavelength lights~~ wavelengths, ~~which is put~~ said device being between said ~~one~~ single-mode waveguide section and the Y branch, ~~part, wavelength selection means of~~ said device reflecting light ~~with~~ of a first wavelength, which is emitted from said light-emitting element, towards said second branch waveguide section, and of transmitting light ~~with~~ of a second wavelength, different from said first wavelength, which is guided by said second branch waveguide section, toward said ~~one~~ single-mode waveguide section.

8. (Currently amended) The optical module according to claim 7, ~~characterized in that~~ further comprising a refractive index matching resin having the same-level refractive index as that of said second branch waveguide, ~~is charged in the optical coupling part~~ said resin being adapted to be between said second branch waveguide section and an optical fiber.

9. (New) The optical module according to claim 4, further comprising an optical active element coupled to said optical waveguide.

10. (New) The optical module according to 9, wherein said optical active element comprises a light-emitting element.

11. (New) The optical module according to claim 9, wherein said optical active element comprises a photoreceptive element.

12. (New) An optical module for coupling to an optical active element, said optical module comprising:

an optical waveguide adapted to be coupled to the optical active element; and

an optical coupling part having a refractive index matching resin therein, said resin having the same-level refractive index as that of said optical waveguide, said optical coupling part being adapted to be positioned between said optical waveguide and the optical active element.

13. (New) The optical module according to claim 12, further comprising an optical active element coupled to said optical waveguide.

14. (New) The optical module according to claim 13, wherein said optical active element comprises a light-emitting element.

15. (New) The optical module according to claim 13, wherein said optical active element comprises a photoreceptive element.

16. (New) An optical module, comprising:

a Y-type branch optical waveguide having a single-mode waveguide section branched into first and second branch waveguide sections, each waveguide section adapted to be coupled to an optical active element; and

optical coupling parts having a refractive index matching resin therein, said resin having the same-level refractive index as that of said optical waveguide, said optical coupling parts being adapted to be positioned between said optical waveguide and the optical active elements.

17. (New) The optical module according to claim 16, further comprising optical active elements coupled to said optical waveguide.

18. (New) The optical module according to claim 17, wherein said optical active elements

include a light-emitting element coupled to said single-mode waveguide section.

19. (New) The optical module according to claim 17, wherein said optical active elements include a photoreceptive element coupled to one of said branch waveguide sections.

20. (New) An optical module, comprising:

a Y-type branch optical waveguide having a single-mode waveguide section branched into first and second branch waveguide sections, each waveguide section adapted to be coupled to an optical active element;

optical coupling parts having a refractive index matching resin therein, said resin having the same-level refractive index as that of said optical waveguide, said optical coupling parts being adapted to be positioned between said optical waveguide and the optical active elements; and

a device for separating lights of different wavelengths, said device being between said single-mode waveguide section and the Y branch, said device reflecting light of a first wavelength, which is guided by a first one of said waveguide sections, towards a second one of said waveguide sections, and of transmitting light of a second wavelength, different from said first wavelength, which is guided by said second one of said waveguide sections, toward a third one of said single-mode waveguide sections.

21. (New) The optical module according to claim 20, further comprising optical active elements coupled to said optical waveguide.

22. (New) The optical module according to claim 21, wherein said optical active elements include a light-emitting element coupled to said single-mode waveguide section.

23. (New) The optical module according to claim 21, wherein said optical active elements include a photoreceptive element coupled to one of said branch waveguide sections.

24. (New) A method of forming an optical module, said method comprising:

providing an optical active element;

providing an optical waveguide separately from the optical active element;

optically coupling the optical waveguide to the optical active element,

wherein the optical waveguide includes a spot-size conversion region configured by gradually increasing or reducing the width or the thickness, or both, of the optical waveguide at the end or inside of the optical waveguide adjacent to where the optical active element is coupled.

25. (New) The method of claim 24, further comprising positioning an optical coupling part between the optical waveguide and the optical active element, the optical coupling part having therein a refractive index matching resin having the same-level refractive index as that of the optical waveguide.